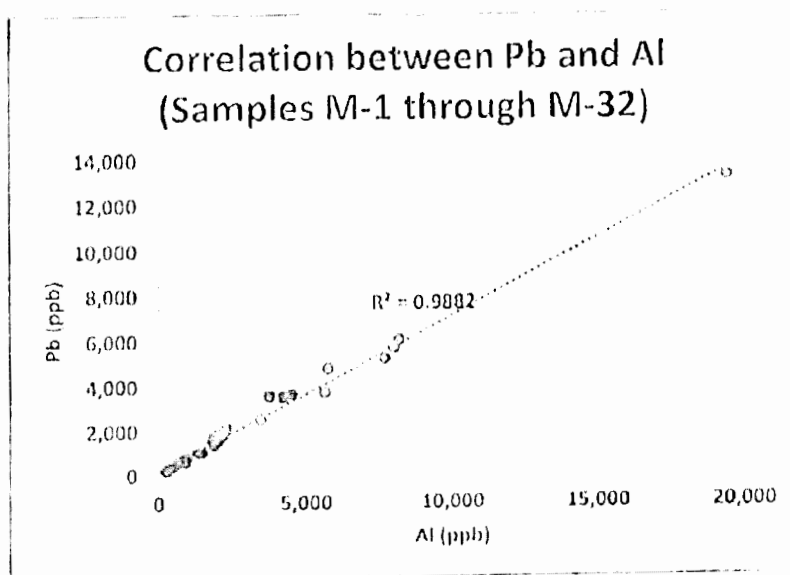
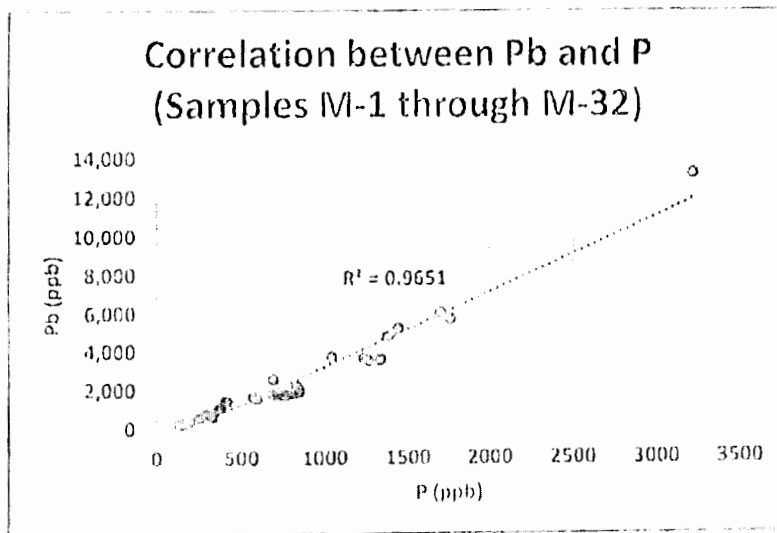


Correlation between lead, phosphorus and aluminum

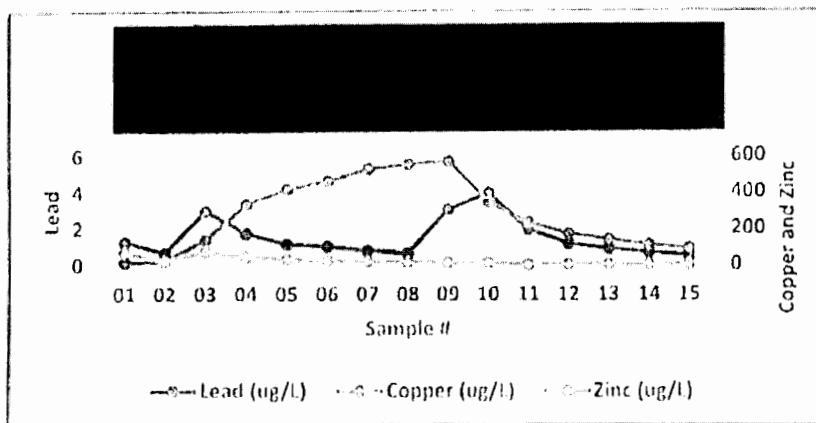
The correlation of lead and phosphate, as well as lead and aluminum, indicate that the samples were captured scale and sediment that had formed inside the pipes while the City of Flint was purchasing water from Detroit. The absence of these chemicals in the current treatment provided by Flint indicate that these elements were not in the water passing through the pipes, but came from the scales inside the service line which had disintegrated into the water or were dislodged into the water.



U.S. EPA Region 5 sampling

[REDACTED] residence (following replacement of service line)

Following the replacement of the [REDACTED] original service line, a series of 15 sequential samples were collected from the kitchen tap to measure the lead levels and other parameters to ensure that the high lead from the original service line had not contaminated the interior plumbing at the [REDACTED] home. With the exception of two areas, lead levels were low throughout the [REDACTED] plumbing following the service line replacement. The two sources of lead that were still detected in the plumbing are likely the water meter (Sample 3) and the new external service shut-off valve (Samples 9-11). Although new brass plumbing components must be lead-free, there can still be some lead that is released from these components.



[REDACTED] ([REDACTED] home)

After Service Line Replacement

Sample #	Site Description	Copper (ug/L)	Lead (ug/L)	Zinc (ug/L)	Cadmium (mg/L)	Iron (mg/L)	Phosphorus (mg/L)
01	Kitchen	13.1	1.3	70.9	U	0.171	U
02	Kitchen	20.1	0.687	23.2	U	0.117	U
03	Kitchen	141	3.01	76.8	U	0.144	U
04	Kitchen	336	1.76	45.4	U	0.151	U
05	Kitchen	419	1.17	32.2	U	0.149	U
06	Kitchen	463	1.03	24.8	U	0.149	U
07	Kitchen	529	0.8	19.6	U	0.146	U
08	Kitchen	554	0.666	14.9	U	0.147	U
09	Kitchen	571	3.07	11.6	U	0.195	U
10	Kitchen	345	3.93	10.3	U	0.282	U
11	Kitchen	233	1.94	0	U	0.283	U

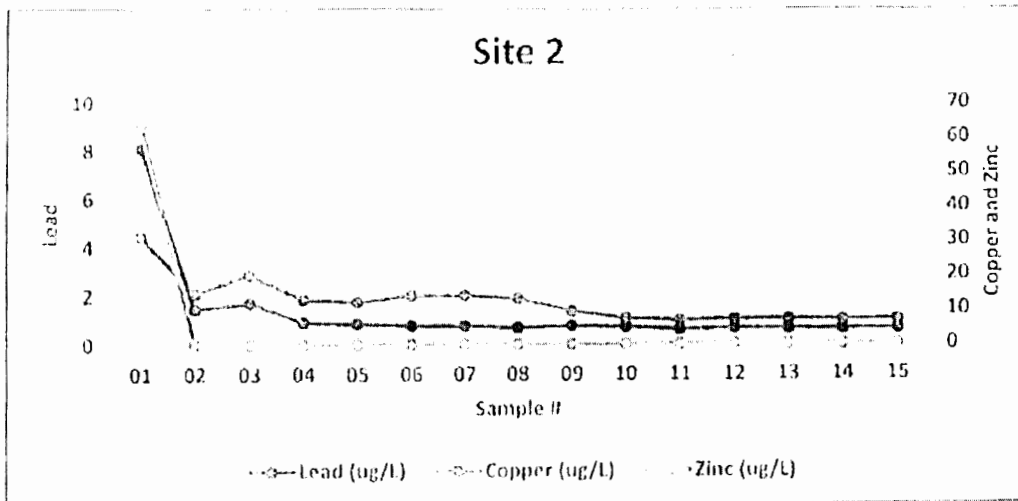
([REDACTED] home)

After Service Line Replacement

Sample #	Site Description	Copper (ug/L)	Lead (ug/L)	Zinc (ug/L)	Cadmium (mg/L)	Iron (mg/L)	Phosphorus (mg/L)
12	Kitchen	171	1.17	0	U	0.290	U
13	Kitchen	139	0.864	0	U	0.292	U
14	Kitchen	110	0.67	0	U	0.294	U
15	Kitchen	91.5	0.505	0	U	0.297	U
16	Bathroom	29.7	5.52	71.3	U	0.259	U
17	Water Heater	70.4	31.7	883	U	0.540	0.0877
18	Water Heater	35	9.74	346	U	0.0870	U

Site #2 (Bryant Street)

Based on the results found at this home, it does not appear that any portion of the service line is made of lead, and as a result, the lead levels are low in most samples. The exception is in Sample 1 which reflects water within approximately 15 feet of the kitchen tap and is likely due to brass components in the faucet, underlying valves and fixtures.



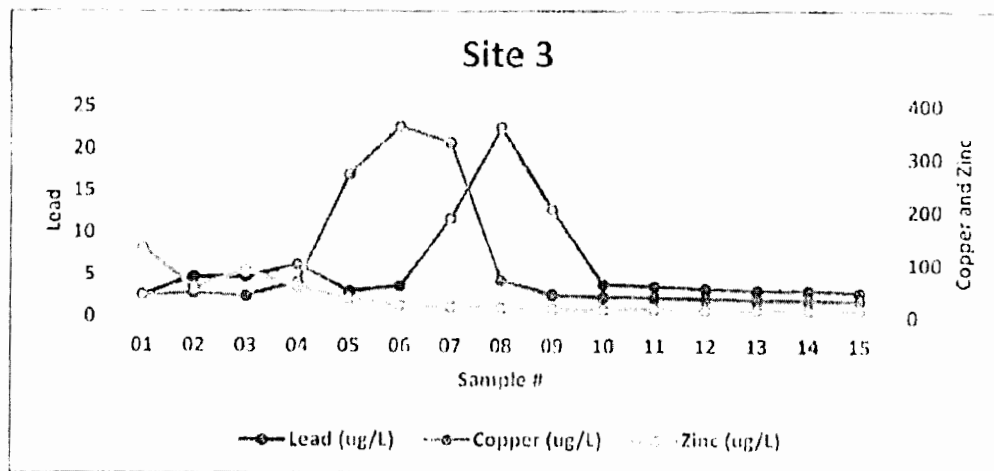
Site 2

(Note: U for Zinc replaced with 0 to show on graph)

Sample #	Copper (ug/L)	Lead (ug/L)	Zinc (ug/L)	Cadmium (mg/L)	Iron (mg/L)	Phosphorus (mg/L)
01	31.1	8.11	64	U	0.0307	U
02	14.7	1.46	U	U	0.0302	U
03	20	1.72	U	U	0.0302	U
04	13	0.933	U	U	0.0301	U
05	12.3	0.862	U	U	0.0311	U
06	14.2	0.795	U	U	0.0298	U
07	14.2	0.769	U	U	0.0311	U
08	13.3	0.691	U	U	0.0317	U
09	9.6	0.774	U	U	0.0319	U
10	7.57	0.715	U	U	0.0313	U
11	7.04	0.611	U	U	0.0301	U
12	7.3	0.655	U	U	0.0336	U
13	7.37	0.644	U	U	0.0308	U
14	7.09	0.631	U	U	0.0313	U
15	7.05	0.621	U	U	0.0300	U

Site #3 (Bryant Street)

Based on the results found at this home, it appears that the portion of the service line from the external service shut-off valve to the water main is made of lead as indicated by the increase in lead levels in samples 7 through 9.



Site 3

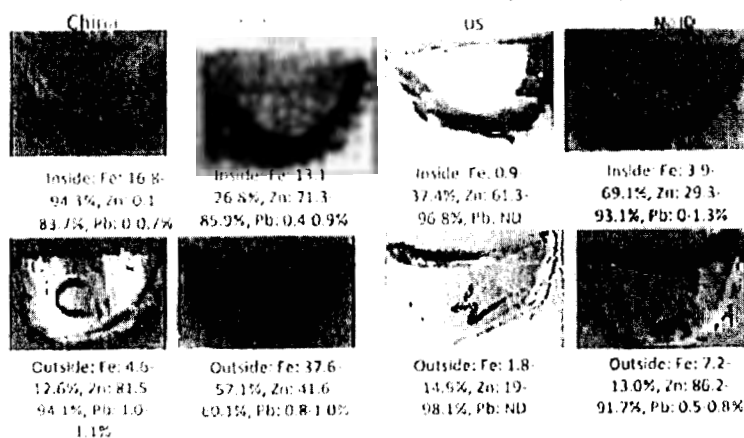
Sample #	Copper (ug/L)	Lead (ug/L)	Zinc (ug/L)	Cadmium (mg/L)	Iron (mg/L)	Phosphorus (mg/L)
01	40.7	2.63	132	U	0.0622	U
02	44.4	4.77	55.3	U	0.249	U
03	39.3	4.79	88.8	U	0.179	U
04	66.8	6.26	57.2	U	0.346	U
05	272	3.07	34.2	U	0.105	U
06	362	3.7	21.4	U	0.0598	U
07	331	11.7	19.5	U	0.0512	U
08	69.9	22.5	16.6	U	0.0399	U
09	42.5	12.7	15.1	U	0.0480	U
10	38.4	3.94	14.4	U	0.0489	U
11	37.5	3.72	14.5	U	0.0492	U
12	34.8	3.39	13.6	U	0.0481	U
13	33.1	3.23	13.1	U	0.0484	U
14	32.8	3.2	13	U	0.0480	U
15	31.4	3	12.3	U	0.0490	U

Analysis of [REDACTED] original service line pipe (galvanized iron portions)

Lead can also be found in galvanized pipe coatings as a contaminant in the zinc that is used to coat the surface of iron pipe in the galvanizing process. As such, two sections of the [REDACTED] original service line were analyzed for lead content.

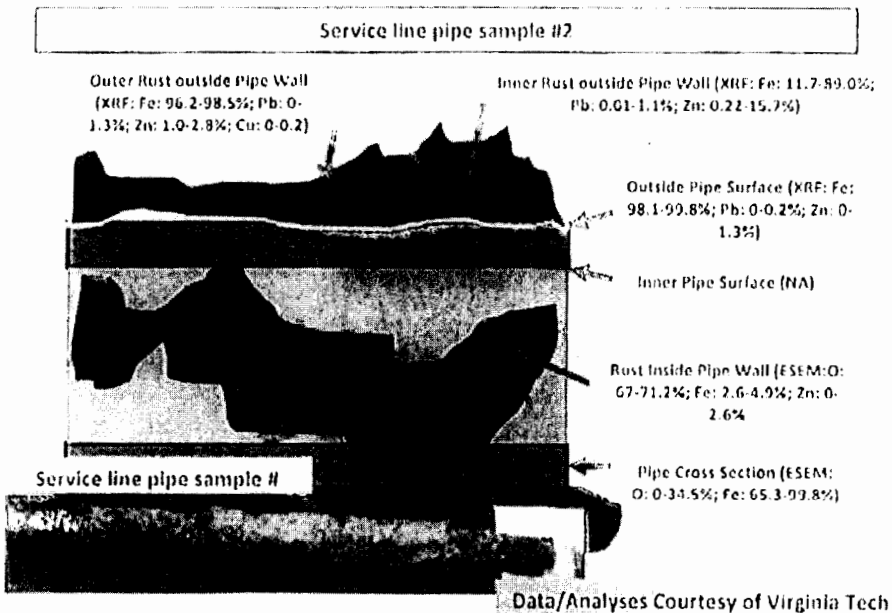
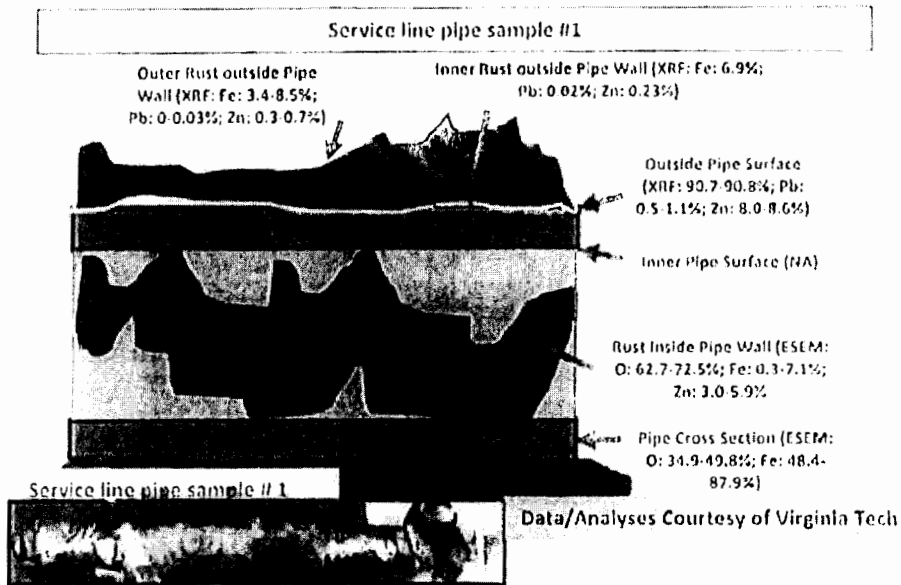
The images and data presented below are for a typical range of galvanized iron pipe.

Lead Content of Galvanized Iron Pipe - Examples



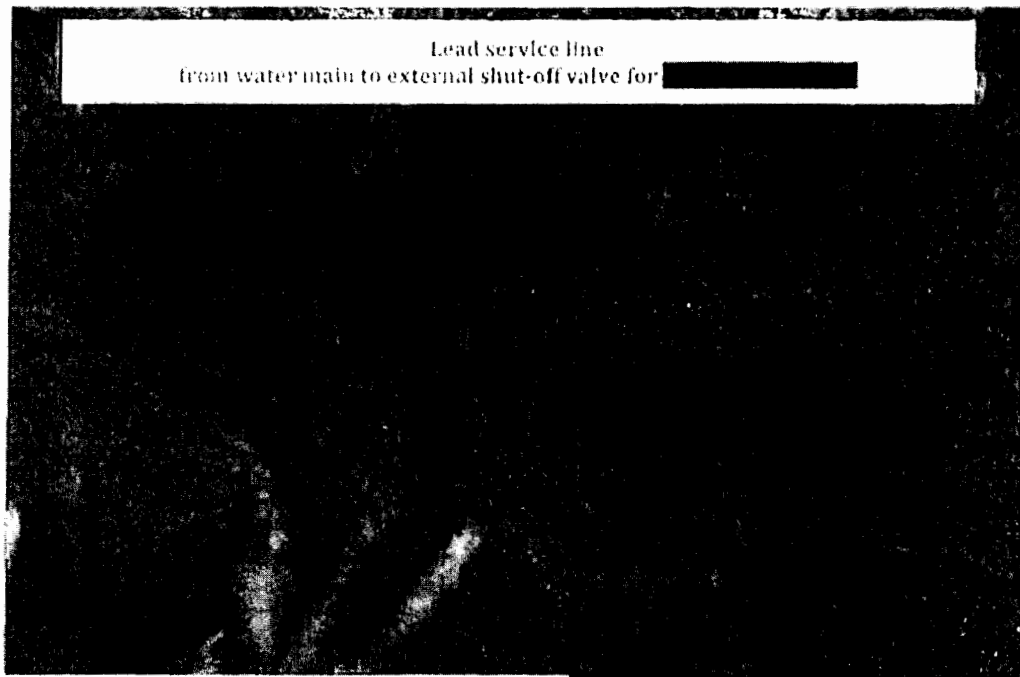
Data/Analyses Courtesy of Virginia Tech

Below are the results of the galvanized pipe analyses conducted by Virginia Tech on the two sections of galvanized iron pipe from the [REDACTED] original service line. The analyses indicate that the [REDACTED] original service line was a typical galvanized iron pipe.



Lead portion of the [REDACTED] original service line

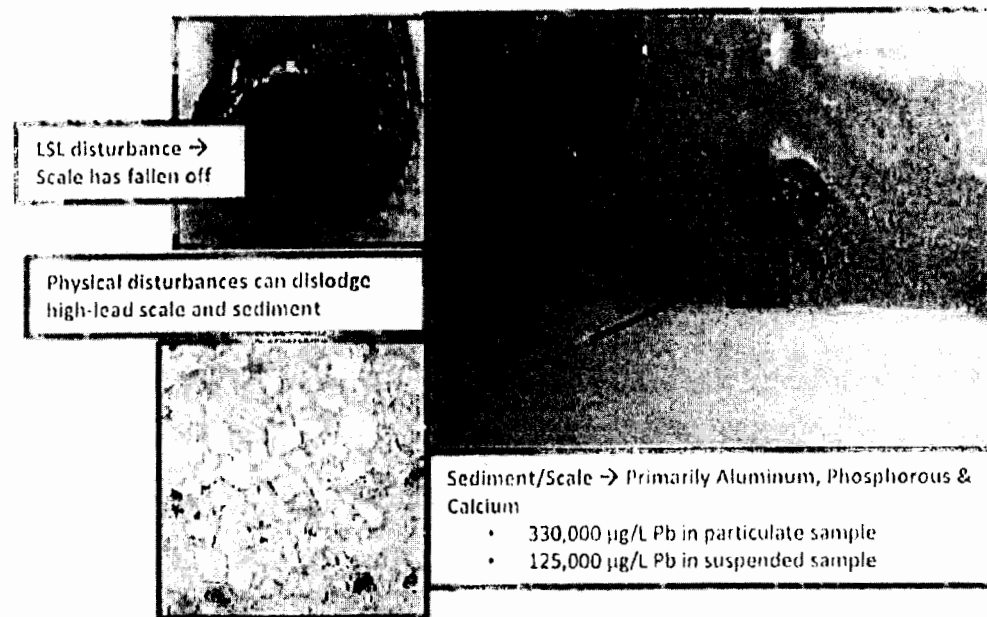
Lead service lines can contribute up to 75 percent of the total mass release into the water. The portion of the [REDACTED] original service line from the water main to the external shut-off valve at the corner of [REDACTED] and Bryant Street is made of lead and is estimated to be approximately 25 feet in length.



Appendix C – Additional Information

Physical disturbance of lead service lines

A recent EPA study indicates that physical disturbances to lead service lines or in proximity to lead service lines can cause the dislodging of the protective scales from within the lines. The photograph below shows the scale that was dislodged from inside a lead service line during routine maintenance work in another city due to a physical disturbance of the line. The dislodged scale and sediment contained a very high concentration of lead.



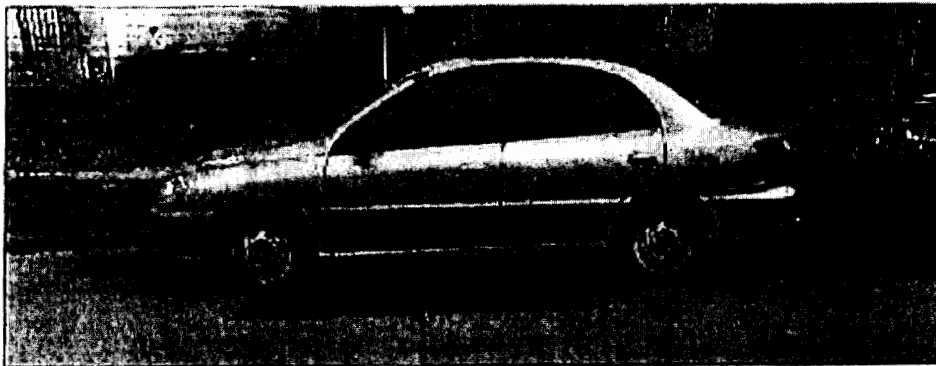
Lead service line disturbances were found to be a common factor for the majority of sites with high lead levels. It is also possible that low water usage may play a role in sites with the highest lead levels.

Lead service line scale analyses conducted by EPA's Office of Research and Development or obtained from peer-reviewed published literature from cities across the U.S. and in Canada (summarized below) show that scales within lead service lines can contain very high concentrations of lead. The yellow highlighted column in the table below shows the percentage of lead that has been found within different scales inside of lead service lines.

Lead & Element Percentages in Important Corrosion Byproduct Solids							
Mineral Name	Formula	% Pb	% C	% O	% S	% P	% Cl
litharge, massicot	PbO	97.80	0.00	7.20	0.00	0.00	
plattnerite, scintillyite	PbO ₂	86.60	0.00	13.40	0.00	0.00	
Cerussite	PbCO ₃	77.50	4.50	18.00	0.00	0.00	
Hydrocerussite	Pb ₃ (CO ₃) ₂ (OH) ₂	80.10	3.10	16.50	0.00	0.00	0.00
Plumbonacrite	Pb ₁₀ (CO ₃) ₆ (OH) ₅ O	81.30	2.80	15.70	0.00	0.00	0.00
Anglesite	PbSO ₄	68.30	0.00	21.10	10.60	0.00	0.00

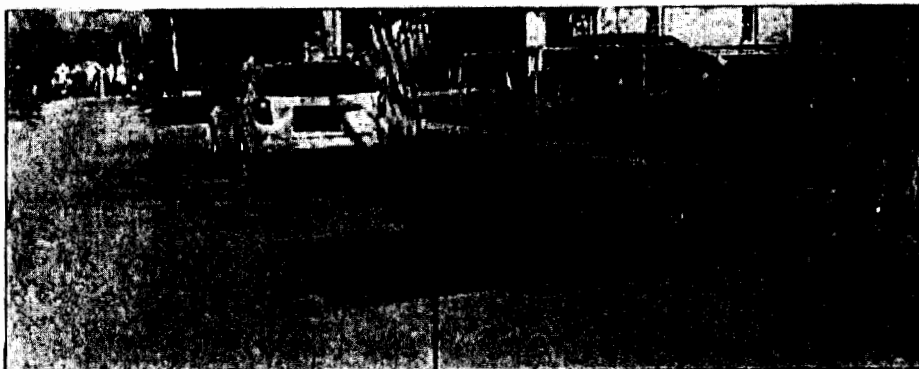
Lead & Element Percentages in Important Corrosion Byproduct Solids							
Mineral Name	Formula	% Pb	% C	% O	% S	% P	% Cl
Leadhillite, Susannite, MacPhersonite	$Pb_4(SO_4)(CO_3)_2(OH)_2$	76.80	2.20	17.80	3.00	0.00	0.00
Hydroxypyromorphite	$Pb_5(PO_4)_3OH$	77.43	0.00	15.55	0.00	6.95	0.00
Chloropyromorphite	$Pb_5(PO_4)_3Cl$	76.38	0.00	14.15	0.00	6.85	2.61
Tertiary Lead Orthophosphate	$Pb_3(PO_4)_2$	76.60	0.00	15.80	0.00	7.60	0.00
Lead(II) orthophosphate	$Pb_3(PO_4)_2$	76.60	0.00	15.80	0.00	7.60	0.00

While visiting the [REDACTED] home, two fresh patches of asphalt were seen along the parkway where the [REDACTED] original service line was located. The jarring and vibration associated with excavation can dislodge the high lead-bearing scales from within the service line pipes.



Recent patch (#1) of asphalt along curb next to the parkway where the [REDACTED] service line runs.

Photograph taken by U.S. EPA on April 27, 2015



Recent patch (#2) of asphalt along curb next to the parkway where the [REDACTED] service line runs.

Photograph taken by U.S. EPA on April 27, 2015



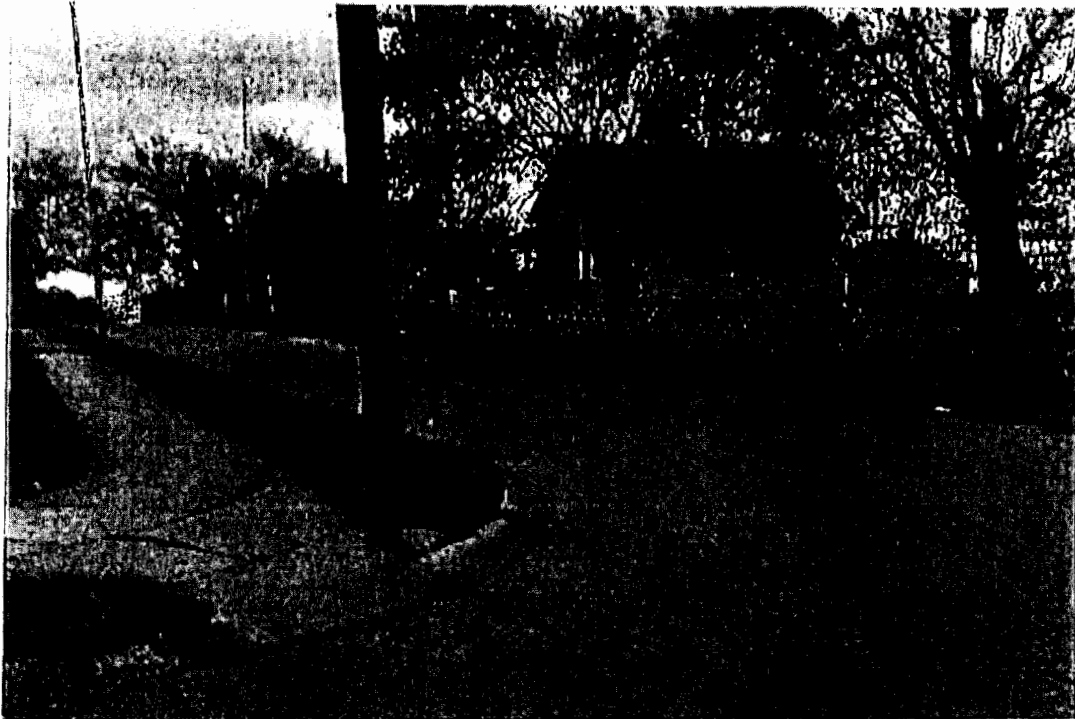
July 2011 image [REDACTED] (view from [REDACTED] toward Bryant Street).

Google 'Street View' Image 1 captured in July 2011 shows no patches in street along curb next to the parkway where the [REDACTED] service line runs toward Bryant Street, indicating that the physical disturbances occurred after the date this image was captured (July 2011).



July 2011 image of [REDACTED] (view from Bryant Street toward [REDACTED]).

Google 'Street View' Image 2 captured in July 2011 shows no patches in street along curb next to the parkway where the [REDACTED] service line runs toward Bryant Street, indicating that the physical disturbances occurred after the date this image was captured (July 2011).



Corner of [REDACTED] and Bryant Street (location of [REDACTED] original external shut-off valve).

Photograph taken by EPA on April 27, 2015 shows no visible signs of physical disturbances in the vicinity of the lead portion of the [REDACTED] service line from the external shut-off valve to the water main on Bryant Street.

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

January 15, 2016

The Honorable Gina McCarthy
Administrator
US Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator McCarthy:

We are extremely concerned about the drinking water crisis in Flint, Michigan.

Over the last several months, this issue has received significant public attention. According to press reports, residents began complaining that their drinking water looked dirty, tasted bad, and was causing rashes after the city switched from water provided by the Detroit water system to water treated by Flint and sourced from the Flint River in April 2014 to save money.¹ The media have also reported that the people of Flint have consistently faced the reality of tap water that exceeded maximum allowable contamination levels of e.g., e. coli, other biological pathogens, and chemical toxicants such as trihalomethanes. The reports suggest these contaminants could cause liver, kidney or central nervous system problems, and an increased risk of cancer.² These accounts also detail studies which separately show that the proportion of Flint area "infants and children with above-average levels of lead in their blood has nearly doubled since the city switched in 2014 from purchasing Detroit's treated water to treating water drawn from the Flint River."³

¹ *Flint Wants Safe Water, and Someone to Answer for Its Crisis*, New York Times (Jan. 9, 2016).

² *City warns of potential health risks after Flint water tests revealed too much disinfection byproduct*, MLive (January 17, 2015).

³ *In Flint, Mich., there's so much lead in children's blood that a state of emergency is declared*, Washington Post (December 15, 2015).

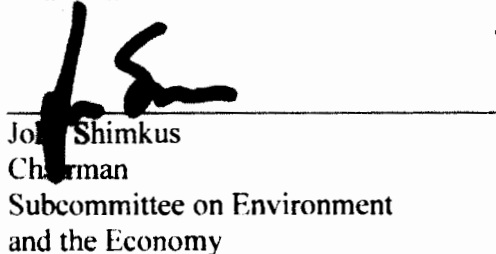
Although the city has now reverted to using treated water from Detroit, according to news reports, testing still reveals elevated lead levels in Flint's water due to corrosion damage in the pipes.⁴ We understand, on December 15, 2015, Flint Mayor Karen Weaver declared a state of emergency for the City of Flint, declaring the situation "a manmade disaster" that caused "irreversible" damage to children.⁵ We are also aware that, on January 5 of this year, Michigan Governor Rick Snyder declared a state of emergency for the Flint area and surrounding county, authorizing the Michigan State Police to coordinate the state's efforts, including requests for assistance from the federal government.⁶

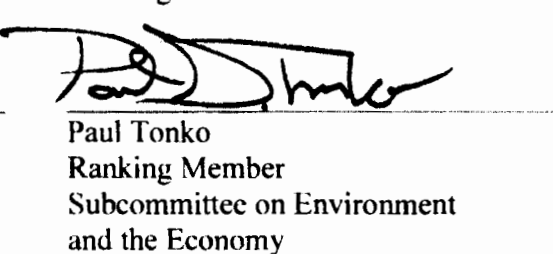
It is our understanding that the Environmental Protection Agency (EPA) has established a Safe Drinking Water Task Force to provide assistance to Flint and has announced plans to audit Michigan's Drinking Water Program.⁷ We urgently request a briefing on these matters and on EPA's anticipated role as the situation in Flint continues to unfold. We ask that you provide this briefing by January 22, 2016. Please contact Dave McCarthy with the Committee Majority staff at (202) 225-2927 and Rick Kessler with the Committee Democratic staff at (202) 225-3641 if you have any questions.

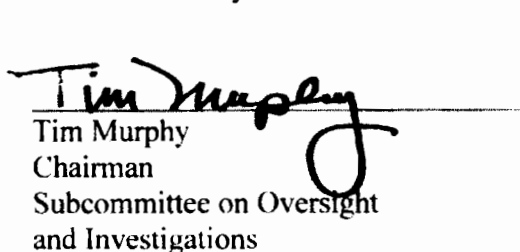
Sincerely,

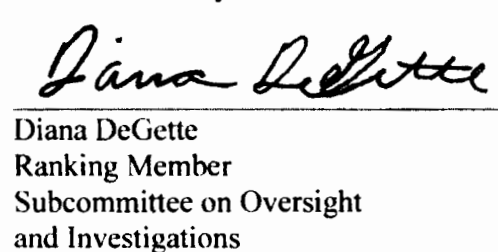

Fred Upton
Chairman


Frank Pallone
Ranking Member


John Shimkus
Chairman
Subcommittee on Environment
and the Economy


Paul Tonko
Ranking Member
Subcommittee on Environment
and the Economy


Tim Murphy
Chairman
Subcommittee on Oversight
and Investigations


Diana DeGette
Ranking Member
Subcommittee on Oversight
and Investigations

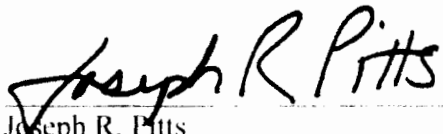
⁴ *How tap water became toxic in Flint, Michigan*, CNN (Jan. 11, 2016).

⁵ *Flint, Michigan, Declares State of Emergency Amid Lead in Drinking Water Scare*, NBC News (Dec. 15, 2015).

⁶ *Governor declares state of emergency over lead in Flint water*, MLive (Jan. 5, 2016).

⁷ Environmental Protection Agency, *Flint Drinking Water Documents* (accessed Jan. 12, 2015) (online at www.epa.gov/mi/flint-drinking-water-documents).

Letter to The Honorable Gina McCarthy
Page 3



Joseph R. Pitts
Chairman
Subcommittee on Health



Gene Green
Ranking Member
Subcommittee on Health

AL-16-000 4321

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3041

February 3, 2016

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator McCarthy,

Since our letter to you of January 15, 2016 requesting information about the drinking water emergency in Flint, Michigan, a number of state and federal actions have been taken to respond to the urgent situation. These actions included more direct involvement by the Environmental Protection Agency (EPA) through its January 21 administrative order directing the Michigan Department of Environmental Quality (MDEQ) and the City of Flint to take certain immediate actions to address the ongoing safety concerns with Flint's drinking water system.

We appreciate your responses to our oversight requests to date, which have included two briefings with relevant Office of Water staff. We look forward to continued, timely access to appropriate officials and information necessary for our assessments of the situation and response activity.

As part of our ongoing oversight, which we are conducting pursuant to Rules X and XI of the U.S. House of Representatives, we seek information sufficient to understand the critical factors that contributed to the crisis and to enable us to evaluate proposed solutions. In keeping with these efforts, and by way of follow-up to Committee staff meetings with your staff, we ask that you respond to the following by February 17, 2016:


1. Describe the current and anticipated specific roles and responsibilities for federal, state, and city authorities in responding to the Flint water emergency. Please include in this response the identification of the lead EPA officials, and their offices and the other federal agency officials and their offices working with EPA on the response and providing technical assistance.

2. Please outline the procedures federal, state, and local authorities will take to assess the scope and levels of public exposure to lead and other contaminants of concern through the Flint drinking water system, including:
 - a. current available exposure information and lead levels in different parts of the drinking water system;
 - b. the timing for completing this assessment; and,
 - c. the benchmarks EPA considers necessary to determine that Flint's drinking water is safe for consumption and use.
 3. Provide an estimate of the timing for corrosion control to provide sufficient coatings on service lines to reduce lead in the drinking water to safe levels, as well as any reasonably anticipated factors that could affect this timeline and the effectiveness of this approach.
 4. Your January 21, 2016 Emergency Order details several required actions by the MDEQ and the City of Flint. What has been the EPA's experience since issuance of the order with both the State and the City in response to that order?
 5. Describe in detail when and how EPA learned that Flint had no corrosion control treatment in place.
 - a. When and how did EPA learn that Flint chose not to implement a corrosion control treatment?
 - b. What is EPA's understanding of why Flint chose not to implement a corrosion control treatment? And why did MDEQ decide not to require Flint to implement a corrosion control treatment immediately once MDEQ learned there was not one in place?
 - c. What was the extent, if any, to which Flint's treatment for controlling E. coli, and its resultant treatment for disinfection by-products (trihalomethanes), contributed to pipe corrosion?
 - d. What basis did MDEQ provide EPA for not requiring Flint to have a corrosion control treatment in place at the time of the switch to the Flint River as a water source?
 - e. What analyses, including but not limited to legal analysis, did EPA perform between April and November 2015 regarding MDEQ's decision not to require Flint to implement a corrosion control treatment? Please provide copies of any memoranda drafted between April and November 2015 reflecting any such analysis.
 6. Did EPA perform or require MDEQ or the Flint drinking water system to perform an assessment of the Flint River water's quality, including information that might pertain to the potential of the Flint River's water to cause corrosion within the Flint drinking water system, prior to the use of the Flint River as a drinking water source?
 7. Please provide copies of all briefing materials prepared by Region 5 personnel for federal, state, and local officials from January 2013 through February 2016 relating to the Flint drinking water system, including the decision to use the Flint River as a drinking water source.
-

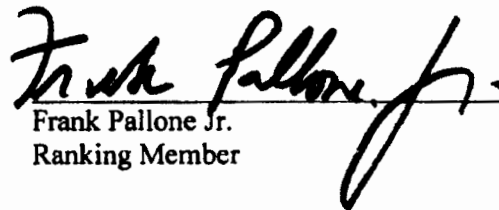
8. Please provide copies of all briefing materials prepared by state and local officials for EPA officials from January 2013 through February 2016 relating to the Flint drinking water system, including the decision to use the Flint River as a drinking water source.
9. Has the EPA reduced or ceased to perform compliance verification activities, such as sampling or audits, under the Safe Drinking Water Act? In the wake of the drinking water crisis in Flint, does EPA intend to restore any reductions in compliance verification of public drinking water systems? To the extent budgetary limitations have affected EPA's enforcement capabilities, what resources are necessary for EPA to fully implement Safe Drinking Water Act compliance verification activities?

If you have any questions about this request, please contact Dave McCarthy of the majority committee staff at (202) 225-2927 or Rick Kessler with the minority staff at (202) 225-3641.

Sincerely,



Fred Upton
Chairman



Frank Pallone Jr.
Ranking Member



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 19 2016

OFFICE OF
WATER

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your February 3, 2016, letter expressing your concern regarding the drinking water crisis in Flint. The situation in Flint demands urgent and sustained action – at all levels of government – to protect the public and help the city recover. Following President Obama's January 14 emergency declaration, the Administration has deployed a multi-agency response effort in Flint, and the U.S. Department of Health and Human Services has been designated the lead federal agency responsible for coordinating federal government response and recovery efforts. As part of the broader federal response effort, the U.S. Environmental Protection Agency is intensely engaged in addressing ongoing threats to public health in Flint, in coordination with the city of Flint and the state of Michigan.

The EPA's immediate priority is to ensure that the residents of Flint have a safe and reliable drinking water supply. Prior to the current crisis, in 2014, the EPA offered technical assistance to the state and the city to return the drinking water system to compliance with the Total Coliform and Disinfection Byproducts rules.

Currently, as detailed below, we are taking an integrated approach to address the important factors related to Flint's drinking water system and lead in drinking water. We are providing technical assistance and review through our national experts on the EPA's Flint Safe Drinking Water Task Force, engaging directly on the ground on re-optimization of corrosion control, and providing extensive support to the city and the state through our own sampling and oversight of state and local sampling efforts. Additionally, we are implementing the Emergency Order issued under section 1431 of the Safe Drinking Water Act. Finally, we are taking actions to strengthen the implementation of the Lead and Copper Rule and to ensure the revisions of the rule further increase protection of public health.

We are focused on supporting the state and the city in addressing system-wide failures, including the lack of effective corrosion control. Re-optimizing corrosion control may take months to

complete, but the steps taken each day make progress towards achieving that goal. EPA scientists, water experts, community involvement coordinators and support staff from Region 5 and the Office of Research and Development are currently stationed in Flint. The organizational chart of EPA's Unified Command Structure is enclosed (Enclosure A). In addition, experts from EPA headquarters, labs and many other offices are supporting the EPA's comprehensive response to this public health emergency.

Beginning in October 2015, the EPA's Flint Safe Drinking Water Task Force, which includes agency experts in corrosion control and lead in drinking water systems, has provided technical assistance to the city of Flint and the Michigan Department of Environmental Quality on steps needed to re-optimize the system and ensure that lead testing is conducted using the proper sampling protocols. A list of Task Force activities is enclosed (Enclosure B), and information about the Task Force, including each set of recommendations, is available on the EPA's website, www.epa.gov/flint/flint-safe-drinking-water-task-force.

There are many factors that will affect the re-optimization of corrosion control, and it is critical that we use data-driven, site-specific information to assess the effectiveness of the corrosion control and ensure the treatment is optimized. EPA staff in Flint are currently conducting residential and water system sampling for lead and other drinking water contaminants and chlorine disinfectant residual – to assess the progress of actions that EPA has directed the state and city to take to restore the safe operation of the treatment plant and the distribution system. Specifically, we are conducting extensive chlorine residual sampling to make sure the system is adequately disinfected, and we are conducting extensive residential lead sampling to help us better understand where in the system the lead is coming from and to determine progress toward re-optimizing corrosion control treatment. We are posting sample results to the EPA's website, www.epa.gov/flint, as soon as they become available. We are also overseeing the residential/commercial drinking water testing and sentinel site and Lead and Copper Rule compliance sampling being conducted by the MDEQ.

In addition, the EPA is providing the city with pipe loop rigs at the drinking water plant that use lead pipes from Flint's distribution system. Pipe loop rigs are pilot-scale distribution systems that can be used to test different concentrations and combinations of treatment chemicals to assess their impact on lead corrosion. We will use the pipe loop rigs to evaluate the effects of water quality changes and different levels of orthophosphate treatment on lead release from the existing pipe scales in order to select the most effective treatment.

To address specific residents' concerns, we set up a Strike Team to visit and test every home that has lead sample results above 150 parts per billion to better understand lead levels in homes and to ensure that the water filters provided by the state are meeting their certified performance rating and adequately filtering lead from the water. By conducting these home visits, we were able to identify issues with aerators and existing in-home water filters. We were then able to help residents address these issues. Subsequently, we are sharing what we are learning from these visits more broadly with residents throughout Flint. In addition, we are working with officials

from the Genesee County Health Department, the Michigan Department of Health and Human Services, the Agency for Toxic Substances and Disease Registry, and the Centers for Disease Control and Prevention to investigate water quality where rashes have been reported. Further, we are conducting extensive community outreach and established a hotline to answer questions and share information.

As you noted in your letter, on January 21, 2016, the Administrator issued an Emergency Order under section 1431 of the Safe Drinking Water Act. The order directs the state of Michigan, MDEQ and city of Flint to take actions necessary to ensure that corrosion control is optimized and that the city establishes the capacity to operate its drinking water system in compliance with the requirements of the law. The EPA is working closely with the city, state and MDEQ on the implementation of actions under the order, and we will ensure that each of these steps is successfully completed in a timely manner. Enclosed is a copy of the order, which provides detailed information about the agency's involvement in Flint and relevant factual background (Enclosure C).

Since the issuance of the order, the state, MDEQ and city have made a number of submissions pursuant to that order and we are continuing to respond and review those submissions. These reviews are ongoing. One important provision of the order is to ensure information is available to the public and, as such, information regarding the submissions to the order are required to be posted to the MDEQ website at www.michigan.gov/flintwater/0,6092,7-345--376646--,00.html. Today, the agency sent a letter to the state, MDEQ and city regarding the status of work to address the serious and ongoing issues with the safety of Flint's public water system and to comply with the order (Enclosure D).

Looking forward, we are taking immediate actions to ensure that the drinking water crisis that occurred in Flint is never repeated. We will conduct an audit of the MDEQ's drinking water program to review public water system compliance with the Safe Drinking Water Act and MDEQ oversight of public water systems. Administrator McCarthy has asked EPA's Office of Inspector General to evaluate the agency's response and its oversight of the MDEQ. The agency will cooperate fully and looks forward to receiving, and promptly acting upon, the IG's assessment and recommendations. Administrator McCarthy also issued an agency-wide Elevation Policy directing the EPA's leadership to encourage prompt and decisive action to address critical public health concerns.

In addition, we are committed to improving the public health protection provided by the Lead and Copper Rule, which covers approximately 68,000 public water systems nationwide. We have begun actions to increase oversight of all state programs to identify and address any deficiencies in implementation of the Lead and Copper Rule. My staff is engaging with all states, system owners and operators and other stakeholders to identify and address lessons from Flint, other potential risks to drinking water safety, and the challenges posed by aging infrastructure nationwide. We will be taking additional near-term actions to further strengthen implementation of the existing Lead and Copper Rule.

Finally, we are actively working on revisions to the rule. In December 2015, the EPA received extensive recommendations from our National Drinking Water Advisory Council and other concerned stakeholders. We are carefully evaluating this input and national experience in implementing the current rule – including the events in Flint – to develop proposed improvements.

We recognize the importance of the Committee's need to obtain information necessary to perform its legitimate oversight functions and are committed to working with your staff on how best to accommodate the Committee's interests in the documents requested in your letter. We have initiated a search for responsive documents.

The EPA remains fully committed to ensuring that Flint's drinking water system is restored to proper functioning as quickly as possible. Again, thank you for your letter. If you have further questions, you may contact me or your staff may contact Cathy Davis in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-2703 or Davis.CatherineM@epa.gov.

Sincerely,

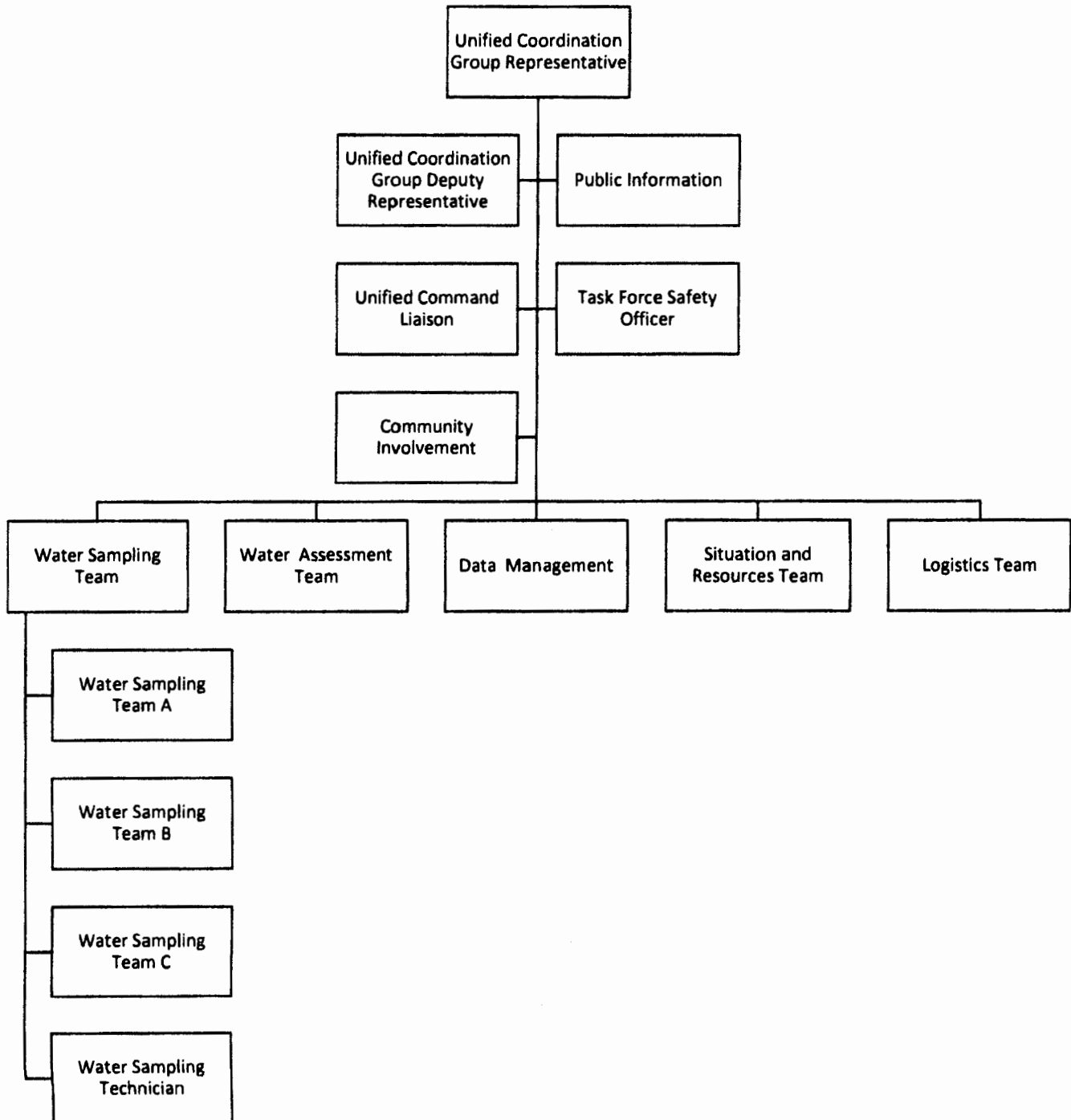
A handwritten signature in black ink, appearing to read "J. Beauvais", written over a horizontal line.

Joel Beauvais
Deputy Assistant Administrator

Enclosures

16-000-4321

Enclosure A
Organizational Chart
Flint Drinking Water Response
EPA Unified Command Structure



Enclosure B: EPA's Flint Safe Drinking Water Task Force Activities

Recommendations and additional information about the Task force are available at www.epa.gov/flint/flint-safe-drinking-water-task-force.

- **February 5, 2016** - Task Force provides recommendations on MDEQ's Draft Sentinel Site Selection.
- **January 20, 2016** - Task Force provides recommendations that all samples for lead analyses, whether for lead and copper rule compliance assessment or other purpose, be collected using wide-mouth sample bottles.
- **January 12, 2016** - Task Force has a conference call with Dr. Mona Hanna-Attisha to discuss how we can work together. One item identified and being planned is "lead in water" training for academic/technical/health people involved in Flint.
- **January 11, 2016** - Task Force discusses status of the Flint situation with the FEMA liaison in Flint and how the Task Force can better coordinate with the State of Michigan's Emergency Operations Center.
- **January 8, 2016** - Task Force has secured funding for the construction of a lead pipe rig system that will be used to evaluate lead corrosion control strategies and predict lead release in response to future water quality and treatment changes in Flint. The pipe rig system is a critical diagnostic tool and will be constructed in-house by Task Force members in EPA's Office of Research and Development.
- **January 7, 2016** - Task Force strongly recommends to Flint not to use excavation as a way to verify the presence of lead service lines as indicated in the Flint incident Action Plan. Physical disturbances can result in prolonged release of pipe scale and sediment with high lead content which can result in a significant increase in lead exposure risk to residents.
- **December 16, 2015** - Task Force provides recommendations that Flint develop and implement a Performance Assessment Plan prior to distribution of water from the Karegnondi Water Authority (KWA) source.
- **December 4, 2015** - Task Force provides comments on Michigan Department of Health and Human Services' "Draft Protocol for Collecting Residential Drinking Water Samples for Lead Analysis".
- **November 25, 2015** - Task Force provides MDEQ with a Draft "Preliminary Assessment of Optimization and Maintenance of Optimal Corrosion Control Treatment" (revised on December 22, 2015, and retitled to "Lead in Drinking Water - Preliminary Assessment"), which documents the activities necessary to enable EPA to provide advice and support to Flint in optimizing and maintaining corrosion control treatment under current water quality conditions and during the transition to the Karegnondi Water Authority (KWA) pipeline.
- **November 23, 2015** - Task Force provides comments on Flint's "Residential Drinking Water Lead & Copper Sampling Instructions".

Enclosure C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE
WASHINGTON, D.C.

IN THE MATTER OF:	:	Proceedings Pursuant To
	:	Section 1431 of the Safe Drinking
City of Flint, Michigan; Michigan	:	Water Act, 42 U.S.C. § 300i
Department of Environmental	:	
Quality; and the State of Michigan,	:	EMERGENCY
	:	ADMINISTRATIVE ORDER
Respondents.	:	

I. INTRODUCTION

1. The Safe Drinking Water Act ("SDWA" or "Act") provides the U.S. Environmental Protection Agency ("EPA" or "Agency") with the authority to order actions when an imminent and substantial endangerment exists and the actions taken by the state and/or local authorities are inadequate to protect public health. EPA has determined that the City of Flint's and the State of Michigan's responses to the drinking water crisis in Flint have been inadequate to protect public health and that these failures continue. As a result, EPA is issuing this SDWA Emergency Order ("Order") to make sure that the necessary actions to protect public health happen immediately. The Order requires that necessary information be provided promptly to the public in a clear and transparent way to assure that accurate, reliable, and trustworthy information is available to inform the public and decisions about next steps. In addition to the issuance of this Order, EPA will promptly begin sampling and analysis of lead levels in tap water in the City of Flint's public water system ("PWS"). EPA will publish these sampling results on its website to provide the public with transparency into the process to abate the public health emergency in the City of

- **November 10, 2015** – Task Force meets in Flint with Rep. Kildee and City of Flint officials to discuss technical issues with optimization of corrosion control.
- **October 30, 2015** – Task Force provides MDEQ with technical comments on Flint Corrosion Control Permit and cover letter.
- **October 23-24, 2015** – Task Force provides MDEQ with technical comments on Flint Corrosion Control Plan.
- **October 21, 2015** – Task Force provides MDEQ with technical comments on Draft School Sampling Protocol.

Flint. In the coming weeks, EPA may take additional actions under the SDWA to address the situation in the City of Flint.

II. STATUTORY AUTHORITY

2. This Order is issued under the authority vested in the Administrator of the EPA by Section 1431 of the SDWA, 42. U.S.C. § 300i. This Order is issued for the purpose of protecting the health of persons who are supplied drinking water by a PWS with conditions that may present an imminent and substantial endangerment to human health.

III. FINDINGS OF FACT

3. The City of Flint, Michigan ("City") owns and operates a PWS that provides piped drinking water for human consumption to its nearly 100,000 citizens.
4. From December 2011 through April 2015, an emergency manager was appointed by the State of Michigan ("State") under Public Act 436 to oversee the management of the City during its financial crisis. During that time, the City became a partner with the Karegnondi Water Authority ("KWA") and decided to no longer purchase treated drinking water from the Detroit Water and Sewerage Department ("Detroit").
5. The Michigan Department of Environmental Quality ("MDEQ") has primary responsibility for the implementation and enforcement of the public water system program in Michigan.
6. Before April 2014, the City purchased finished drinking water from Detroit.
7. On or around April 25, 2014, the City ceased purchasing treated drinking water from Detroit and began drawing water from the Flint River as its source water.

8. Between July and December 2014, the City conducted the first of two rounds of six month lead sampling under the Lead and Copper Rule ("LCR"), 40 C.F.R. § 141.80 *et seq.*
9. The City conducted the second of two rounds of six month lead sampling under the LCR between January and June 2015. These rounds of sampling showed that the levels of lead in the City water supply were rapidly rising.
10. On or about April 24, 2015, MDEQ notified EPA that the City did not have corrosion control treatment in place at the Flint Water Treatment Plant.
11. During May and June, 2015, EPA Region 5 staff at all levels expressed concern to MDEQ and the City about increasing concentrations of lead in Flint drinking water and conveyed its concern about lack of corrosion control and recommended that the expertise of EPA's Office of Research and Development should be used to avoid further water quality problems moving forward.
12. On July 21, 2015, EPA Region 5 discussed with MDEQ the City's lead in drinking water issues and implementation of the LCR and MDEQ agreed to require corrosion control as soon as possible.
13. On August 17, 2015, MDEQ sent a letter to the City recommending the City implement corrosion control treatment as soon as possible, but no later than January 1, 2016, and to fully optimize its treatment within six months.
14. On August 31, 2015, EPA Region 5 had a call with MDEQ to discuss outreach to citizens to reduce exposures to high lead levels in Flint drinking water and reiterate EPA's offer of technical assistance in implementing corrosion control treatment.

15. On September 3, 2015, Flint Mayor Dayne Walling announced that the City will implement corrosion control treatment and invited EPA corrosion control experts to join the Flint Technical Advisory Committee ("Flint TAC").
16. On September 27, 2015, EPA Region 5 Administrator Susan Hedman called MDEQ Director Dan Wyant to discuss the need for expedited implementation of corrosion control treatment, the importance of following appropriate testing protocols, urged MDEQ to enlist Michigan Department of Health and Human Services' involvement and discussed options to provide bottled water/premixed formula/filters until corrosion control is optimized.
17. On October 7, 2015, the Flint TAC met about the City's corrosion control and treatment. The Flint TAC recommended returning to Detroit water as the best course of action for the City.
18. On October 16, 2015, EPA established the Flint Safe Drinking Water Task Force ("EPA Flint Task Force") to provide the Agency's technical expertise through regular dialogue with designated officials from MDEQ and the City.
19. On or around October 16, 2015, the City switched back to purchasing finished water from Detroit, now called the Great Lakes Water Authority.
20. On November 25, 2015, the EPA Flint Task Force requested information that would allow EPA to determine the progress being made on corrosion control in the City; this information has not been received by EPA. This information includes water quality parameter measurements (pH, total alkalinity, orthophosphate, chloride, turbidity, iron, calcium, temperature, conductivity) in the distribution system. The EPA Flint Task Force has also made subsequent requests and recommendations.

<http://www.epa.gov/mi/flint-drinking-water-documents> The City is required by its MDEQ permit to monitor for these parameters at 25 sites quarterly and at 10 of these sites weekly. Because the City has not provided the information requested by the EPA Flint Task Force EPA does not have the information that would provide any assurance that contamination in the City's water system has been controlled.

21. On or around December 9, 2015, the City began feeding additional orthophosphate at the Flint Water Treatment Plant to begin optimizing corrosion control treatment. Notwithstanding the orthophosphate addition, high levels of lead and other contaminants are presumed to persist in the City's water system until LCR optimization process, utilizing sampling and monitoring requirements, have confirmed lead levels have been reduced.
22. On December 14, 2015 the City declared an emergency.
23. On January 14, 2016, the Governor of the State requested a declaration of major disaster and emergency and requested federal aid.
24. On January 16, 2016, the President of the United States declared a federal emergency in the City.
25. The presence of lead in the City water supply is principally due to the lack of corrosion control treatment after the City's switch to the Flint River as a source in April 2014. The river's water was corrosive and removed protective coatings in the system. This allowed lead to leach into the drinking water, which can continue until the system's treatment is optimized.
26. Lead occurs in drinking water from two sources: lead in raw water supplies and corrosion of plumbing materials in the water distribution system (i.e., corrosion

byproducts). Most lead contamination is from corrosion byproducts. The amount of lead in drinking water attributable to corrosion byproducts depends on a number of factors, including the amount and age of lead bearing materials susceptible to corrosion, how long the water is in contact with the lead containing surfaces, and how corrosive the water in the system is toward these materials. *Final Rule: Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper*, 56 Fed. Reg. 26460, 26463 (June 7, 1991).

27. EPA has set the Maximum Contaminant Level Goal ("MCLG") at zero for lead because (1) there is no clear threshold for some non-carcinogenic lead health effects, (2) a substantial portion of the sensitive population already exceeds acceptable blood lead levels, and (3) lead is a probable carcinogen. 56 Fed. Reg. at 26467. Pregnant women, unborn children, and children under the age of six are particularly sensitive to lead exposure.
28. The concentration of lead in whole blood has been the most widely used index of total lead exposure. Lead exposure across a broad range of blood lead levels has been associated with a spectrum of patho-physiological effects, including interference with heme synthesis necessary in the formation of red blood cells, anemia, kidney damage, impaired reproductive function, interference with vitamin D metabolism, impaired cognitive performance (as measured by IQ tests, performance in school, and other means), delayed neurological physical development, and elevation in blood pressure. 56 Fed. Reg. 26467-68.
29. EPA finds that consumption of lead in water contributes to increase in blood lead levels. The Centers for Disease Control and Prevention uses a reference level of 5

micrograms per deciliter to identify children with elevated blood lead levels. This new level is based on the U.S. population of children ages 1 – 5 years who are in the highest 2.5% of children when tested for lead in their blood.

http://www.cdc.gov/ncelh/lead/acclpp/blood_lead_levels.htm

30. Under the LCR, the “action level” for lead is the concentration of lead at which corrective action is required. 40 C.F.R. § 141.2.
31. EPA’s LCR includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples collected at consumers’ taps. The action level for lead is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during the monitoring period conducted in accordance with 40 C.F.R. § 141.86 is greater than 0.015mg/L (i.e., if the “90th percentile” is greater than 0.015mg/L). 40 C.F.R. § 141.80(c). When a large system exceeds this action level, the LCR requires the system to: 1) implement public education requirements; 2) implement all applicable source water treatment requirements specified by the primacy agency under 40 C.F.R. § 141.83; and (3) if the system is exceeding the action level after implementation of all applicable corrosion control and source water treatment requirements, then the system must replace lead service lines in accordance with 40 C.F.R. § 141.84.
32. All large systems (over 50,000 persons) are required to either complete corrosion control treatment steps in 40 C.F.R. § 141.91(d) or be deemed to have optimized corrosion control treatment under 40 C.F.R. § 141.81(b)(2) or (b)(3).

33. Based on the foregoing, EPA finds that water provided by the City to residents poses an imminent and substantial endangerment to the health of those persons. Those persons' health is substantially endangered by their ingestion of lead in waters that persons legitimately assume are safe for human consumption. This imminent and substantial endangerment will continue unless preventive actions are taken.
34. The City, MDEQ and the State have failed to take adequate measures to protect public health. Although some progress has been made in addressing the drinking water crisis in the City, there continue to be delays in responding to critical EPA recommendations and in implementing the actions necessary to reduce and minimize the presence of lead and other contaminants in the water supply both now and in the near future. The Respondents have failed and continue to fail to provide the information necessary for EPA, the EPA Flint Task Force and the City's PWS customers to fully understand and respond promptly and adequately to the current deficiencies. EPA remains concerned that the City lacks the professional expertise and resources needed to carry out the recommended actions and to safely manage the City's PWS.
35. In accordance with SDWA Section 1431(a), 42 U.S.C. § 300i(a), to the extent practicable EPA has consulted with state and local authorities regarding the information on which this EPA action is based.
36. This Order and the requirements set forth herein are necessary to ensure adequate protection of public health in the City.

37. As a result of the emergency, EPA will promptly begin sampling and analysis of lead levels and other contaminants in the City to assure that all regulatory authorities and the public have accurate and reliable information.
38. EPA will make its LCR sampling results available to the public on the Agency's website.

IV. CONCLUSIONS OF LAW

39. Section 1431 (a), 42 U.S.C. § 300i(a), specifies that the EPA Administrator, upon receipt of information that a contaminant which is present in or likely to enter a public water system that may present an imminent and substantial endangerment to the health of persons, and that State and local authorities have not acted to protect the health of such persons, may take such actions as she may deem necessary in order to protect the health of such persons.
40. The City owns and operates a "public water system" within the meaning of SDWA Section 1401.
41. MDEQ is an instrumentality of the State.
42. The City, State and MDEQ are "persons" as defined in SDWA Section 1401(c)(12).
43. Respondents' cessation of purchased water from Detroit and switch to the Flint River as its source water triggered a cascade of events that directly resulted in the contribution of lead and other "contaminants" that are within the meaning of SDWA Sections 1401(c)(6) and 1431 of the Act.
44. The contaminants introduced by Respondents are present in or likely to enter a PWS.
45. Based upon the information and evidence, EPA determines that Respondents' actions that resulted in the introduction of contaminants, which entered a public water system

and have been consumed and may continue to be consumed by those served by the public water system, present an imminent and substantial endangerment to the health of persons.

46. The lead and other contaminants will remain present in the PWS and will continue to present an imminent and substantial endangerment to the health of persons until the underlying problems with the corrosion control treatment and fundamental deficiencies in the operation of the PWS are corrected and sampling results confirm the lead and other contaminants are adequately treated.
47. Respondents have failed to take adequate measures to protect public health.
48. The EPA has consulted with the State and local authorities, to the extent practicable, to confirm the correctness of the information upon which this ORDER is based and to ascertain the actions which such authorities are or will be taking. All requisite conditions have been satisfied for the EPA action under SDWA Section 1431(a)(1), 42 U.S.C. § 300i(a)(1).
49. The EPA finds that there is an imminent and substantial endangerment to the people drinking water from the public water system of the City of Flint and that the actions taken by the State and/or the City are inadequate to protect public health. The actions required by this ORDER are necessary to protect the health of persons who are currently consuming or who may consume or use water from the City's PWS.

V. ORDER

Based on the foregoing Findings and Conclusions, and pursuant to Section 1431 of the Act, 42 U.S.C. 300i,

IT IS ORDERED:

Intent to Comply

50. Within one day of the effective date of this Order, Respondents shall notify EPA in writing of their intention to comply with the terms of this Order. For the purposes of this Order, "day" shall mean calendar day.

Reporting Requirements

51. Within five days of the effective date of this Order, the State shall create, and thereafter maintain, a publicly available website. Respondents must post on this website all reports, sampling results, plans, weekly status reports on the progress of all requirements and all other documentation required under this Order. The Respondents shall not publish to this website any personally identifiable information.

Response to EPA Flint Task Force Recommendations, Requests for Information and Sampling Activities

52. The Respondents shall within 10 days of the effective date of this Order respond in writing, in accordance with Paragraph 51, to all of the EPA Flint Task Force's requests and recommendations made on November 25, 2015 and subsequent dates. The response shall include all actions Respondents have taken and intend to take in response to those requests and recommendations. The EPA Flint Task Force's requests and recommendations are publicly available at <http://www.epa.gov/mi/flint-drinking-water-documents>.
53. Within 10 days of the effective date of the Order the Respondents shall provide the following information in accordance with Paragraph 51:
- a. Water quality parameter measurements (pH, total alkalinity, orthophosphate, chloride, turbidity, iron, calcium, temperature, conductivity) in the distribution

system. The City is required by the MDEQ permit to monitor for these parameters at 25 sites quarterly and at 10 of these sites weekly;

- b. All lead in water testing results for the City since January 2013, including those not used for LCR compliance; and
- c. Identification of areas (e.g., zip codes, neighborhoods) in the City with elevated blood lead levels.

54. Within 10 days of the effective date of the Order, the Respondents shall provide, without publicly disclosing any personally identifiable information, the following directly to the EPA in accordance with Paragraph 66:

- a. Existing inventory of homes with lead service lines in Excel or a similar format;
- b. Addresses of homes that have had water service interruptions or street disturbances (e.g., water main breaks, road/sidewalk construction, etc.) within the last year; and
- c. Addresses of currently unoccupied homes.

55. Respondents shall cooperate with EPA as the Agency conducts LCR sampling and other diagnostic activities in the City.

Treatment and Source Water

56. To ensure that treated water meets finished water quality goals and is consistently maintained throughout the distribution system, that existing and potential plant operational and mechanical start-up issues are identified and addressed, and that water plant operations staff are proficient in treating the existing and new source water, Respondents shall comply with Paragraphs 57, 58 and 59.

57. Respondents shall maintain chlorine residual in the distribution system in accordance with SDWA and the National Primary Drinking Water Regulations ("NPDWRs").
58. The City shall continue to add corrosion inhibitors (e.g., orthophosphate booster) at levels sufficient to re-optimize corrosion control in the distribution system.
59. To address optimization of corrosion control for the system as operated with its current water source, within 14 days of the effective date of this Order the Respondents shall submit to MDEQ and post in accordance with Paragraph 51:
- a. Submit a plan and schedule to the MDEQ to review and revise as needed designated optimal corrosion control and water quality parameters as well as monitoring plans for LCR compliance and all other monitoring plans developed to ensure that the treatment plant is consistently and reliably meeting plant performance criteria and all other NPDWRs;
 - b. Submit a sampling plan for daily monitoring of water quality parameters in the distribution system with results compiled in a weekly report in an approved format; and
 - c. Submit an operations plan for the corrosion control equipment (storage day tanks, feed/injection systems), with results compiled in a weekly format, that includes monitoring, calibration, verification (pump catch, etc.) as well as daily monitoring of finished water corrosion control parameters. Results shall be submitted and posted weekly.
60. Respondents shall not effectuate a transition to a new water source for the City's PWS (e.g., from KWA) until such time as they have submitted a written plan, developed through consultation with appropriate experts and after providing adequate

advanced notice and an opportunity for public comment, to MDEQ and in accordance with Paragraph 51, demonstrating that the City has the technical, managerial and financial capacity to operate its PWS in compliance with SDWA and the NPDWRs and that necessary infrastructure upgrades, analysis, and testing have been completed to ensure a safe transition. Such plans shall include, but not be limited to, provisions addressing:

- a. The impacts on corrosion control for any new source water and an operations plan for periodic use of existing sources of water;
- b. Completion of corrosion control study for any new sources;
- c. Implementation of a "performance period" that allows for the demonstration of the adequacy of treatment of the new water source to meet all NPDWRs before it can be distributed to residents; and
- d. The City's technical, managerial and financial capacity to meet SDWA's applicable requirements, including the NPDWRs, during and after the transition to any new water source.

Treatment and Distribution System Management

- 61. Within 15 days of the effective date of this Order, the City must demonstrate, and the MDEQ and State must ensure, the City has the necessary, capable and qualified personnel required to perform the duties and obligations required to ensure the PWS complies with the SDWA and the NPDWRs.
- 62. To ensure the City's PWS is adequately operated to meet SDWA and all NPDWRs, within 30 days of the effective date of this Order, the Respondents shall submit the steps they will take to develop and implement a distribution system water quality

1

optimization plan to MDEQ and in accordance with Paragraph 51, to evaluate and improve its programs that affect distribution system water quality, including: evaluating conditions within the distribution system; creating better documentation; and enhancing communication between the various utility functions that impact distribution system water quality. The MDEQ must ensure that this plan is adequate to ensure SDWA compliance and the State must ensure it is executed.

Independent Advisory Panel ("IAP")

63. Within seven days of the effective date of this Order, the MDEQ and State, with the City's input and concurrence, shall engage a panel of independent, nationally-recognized experts on drinking water treatment, sampling, distribution system operation, and members of the affected community to advise and make public recommendations to the City on steps needed to mitigate the imminent and substantial endangerment to the health of persons and general operation of the City's PWS to ensure compliance with SDWA and the NPDWRs.
64. The charge to the IAP will include the following:
- a. Make recommendations to the Respondents, and for consideration by the EPA, to ensure the safe operation of the City's PWS.
 - b. Make other recommendations to the Respondents, and for consideration by the EPA, to better serve the community served by the City's PWS.

VI. PARTIES BOUND

65. The provisions of this Order shall apply to and bind Respondents and their officers, employees, agents, successors and assigns.

VII. GENERAL PROVISIONS

66. All submittals and inquiries pursuant to this Order shall be addressed to:

Mark Pollins, Director
Water Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
William Jefferson Clinton South Building
1200 Pennsylvania Avenue NW
Room 3104
Washington, DC 20460
pollins.mark@epa.gov

67. All plans, reports, notices or other documents submitted by Respondents under this Order shall be accompanied by the following statement signed by a responsible official.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

68. Record preservation. Respondents shall retain, during the pendency of this Order, and for a minimum of six years after its termination, all data, records and documents in its possession or control, or which comes into its possession or the possession of its divisions, officers, directors, employees, agents, contractors, successors, and assigns, which relate in any way to this Order. After the above mentioned six year period, Respondents shall provide written notification to EPA 60 calendar days before the destruction of any data, records, or documents that relate in any way to this Order or its implementation. At the EPA's request, Respondents shall then make records available to the EPA for inspection and/or retention, or shall provide copies of any such records to EPA before discarding.

69. Within 10 days of the effective date of this Order, or at the time of retaining any agent, consultant, or contractor for the purpose of carrying out terms of this Order, Respondents shall enter into an agreement with any such agents, consultants, or contractors whereby such agents, consultants, or contractors will be required to provide Respondents a copy of all documents produced under this Order.
70. EPA retains all of its information gathering and inspections authorities and rights, including the right to bring enforcement actions related thereto, under SDWA and any other applicable statutes or regulations.
71. Pursuant to SDWA Section 1431(b), 42 U.S.C. § 300i, in the event Respondents violate, fail or refuse to comply with any of the terms or provisions of this Order, EPA may commence a civil action in U.S. District Court to require compliance with this Order and to assess a civil penalty of up to \$21,500 per day of violation under SDWA, as adjusted by the Federal Civil Penalties Inflation Adjustment Act of 1990, amended by the Debt Collection Improvement Act of 1996, and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19.
72. Compliance with the terms and conditions of this Order shall not in any way be construed to relieve Respondents of their obligations to comply with all applicable provisions of federal, state, or local law, nor shall it be construed to be a determination of any issue related to any federal, state, or local permit. Compliance with this Order shall not be a defense to any actions subsequently commenced for any violation of federal laws and regulations administered by EPA, and it is the responsibility of Respondents to comply with such laws and regulations.

73. EPA may modify this Order to ensure protection of human health and the environment. Such modification shall be in writing and shall be incorporated into this Order.
74. This Order shall constitute final agency action by EPA.

VIII. EFFECTIVE DATE

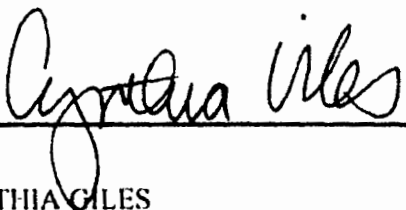
75. Under SDWA Section 1431, 42 U.S.C. § 300i, this Order shall be effective immediately upon Respondents' receipt of this Order. If modifications are made by the EPA to this Order, such modifications will be effective on the date received by Respondents. This Order shall remain in effect until the provisions identified in the Order have been met in accordance with written EPA approval.

IX. TERMINATION

76. The provisions of this Order shall be deemed satisfied upon Respondents' receipt of written notice from the EPA that Respondents have demonstrated, to the satisfaction of the EPA, that the terms of this Order, including any additional tasks determined by EPA to be required under this Order or any continuing obligation or promises, have been satisfactorily completed.

1/21/16

Date



CYNTHIA GILES
Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
William Jefferson Clinton South Building
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

February 3, 2016

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator McCarthy,

Since our letter to you of January 15, 2016 requesting information about the drinking water emergency in Flint, Michigan, a number of state and federal actions have been taken to respond to the urgent situation. These actions included more direct involvement by the Environmental Protection Agency (EPA) through its January 21 administrative order directing the Michigan Department of Environmental Quality (MDEQ) and the City of Flint to take certain immediate actions to address the ongoing safety concerns with Flint's drinking water system.

We appreciate your responses to our oversight requests to date, which have included two briefings with relevant Office of Water staff. We look forward to continued, timely access to appropriate officials and information necessary for our assessments of the situation and response activity.

As part of our ongoing oversight, which we are conducting pursuant to Rules X and XI of the U.S. House of Representatives, we seek information sufficient to understand the critical factors that contributed to the crisis and to enable us to evaluate proposed solutions. In keeping with these efforts, and by way of follow-up to Committee staff meetings with your staff, we ask that you respond to the following by February 17, 2016:


1. Describe the current and anticipated specific roles and responsibilities for federal, state, and city authorities in responding to the Flint water emergency. Please include in this response the identification of the lead EPA officials, and their offices and the other federal agency officials and their offices working with EPA on the response and providing technical assistance.

2. Please outline the procedures federal, state, and local authorities will take to assess the scope and levels of public exposure to lead and other contaminants of concern through the Flint drinking water system, including:
 - a. current available exposure information and lead levels in different parts of the drinking water system;
 - b. the timing for completing this assessment; and,
 - c. the benchmarks EPA considers necessary to determine that Flint's drinking water is safe for consumption and use.
 3. Provide an estimate of the timing for corrosion control to provide sufficient coatings on service lines to reduce lead in the drinking water to safe levels, as well as any reasonably anticipated factors that could affect this timeline and the effectiveness of this approach.
 4. Your January 21, 2016 Emergency Order details several required actions by the MDEQ and the City of Flint. What has been the EPA's experience since issuance of the order with both the State and the City in response to that order?
 5. Describe in detail when and how EPA learned that Flint had no corrosion control treatment in place.
 - a. When and how did EPA learn that Flint chose not to implement a corrosion control treatment?
 - b. What is EPA's understanding of why Flint chose not to implement a corrosion control treatment? And why did MDEQ decide not to require Flint to implement a corrosion control treatment immediately once MDEQ learned there was not one in place?
 - c. What was the extent, if any, to which Flint's treatment for controlling E. coli, and its resultant treatment for disinfection by-products (trihalomethanes), contributed to pipe corrosion?
 - d. What basis did MDEQ provide EPA for not requiring Flint to have a corrosion control treatment in place at the time of the switch to the Flint River as a water source?
 - e. What analyses, including but not limited to legal analysis, did EPA perform between April and November 2015 regarding MDEQ's decision not to require Flint to implement a corrosion control treatment? Please provide copies of any memoranda drafted between April and November 2015 reflecting any such analysis.
 6. Did EPA perform or require MDEQ or the Flint drinking water system to perform an assessment of the Flint River water's quality, including information that might pertain to the potential of the Flint River's water to cause corrosion within the Flint drinking water system, prior to the use of the Flint River as a drinking water source?
 7. Please provide copies of all briefing materials prepared by Region 5 personnel for federal, state, and local officials from January 2013 through February 2016 relating to the Flint drinking water system, including the decision to use the Flint River as a drinking water source.
-

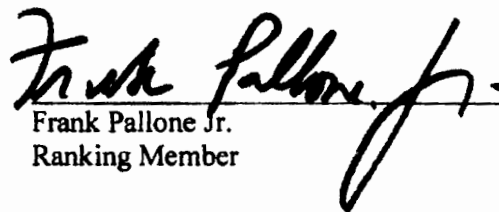
8. Please provide copies of all briefing materials prepared by state and local officials for EPA officials from January 2013 through February 2016 relating to the Flint drinking water system, including the decision to use the Flint River as a drinking water source.
9. Has the EPA reduced or ceased to perform compliance verification activities, such as sampling or audits, under the Safe Drinking Water Act? In the wake of the drinking water crisis in Flint, does EPA intend to restore any reductions in compliance verification of public drinking water systems? To the extent budgetary limitations have affected EPA's enforcement capabilities, what resources are necessary for EPA to fully implement Safe Drinking Water Act compliance verification activities?

If you have any questions about this request, please contact Dave McCarthy of the majority committee staff at (202) 225-2927 or Rick Kessler with the minority staff at (202) 225-3641.

Sincerely,



Fred Upton
Chairman



Frank Pallone Jr.
Ranking Member

Congress of the United States

Washington, DC 20510

January 27, 2016

Administrator Curtis Spalding
United States Environmental Protection Agency
New England Region (Region 1)
5 Post Office Square – Suite 100
Boston, MA 02109-3912

RECEIVED

FEB 04 2016

OFFICE OF THE REGIONAL ADMINISTRATOR

Dear Administrator Spalding,

We are writing in strong support for the creation of the New England Center for Brownfields Redevelopment (NEBR) that will be located at the University of Connecticut (UConn) under the EPA TAB program. NEBR will provide technical assistance to New England communities to advance brownfield redevelopment projects.

With the creation of the NEBR, there will be an interactive website for the PREPARED Workbook that EPA recently co-developed with Vita Nuova, one of the NEBR partners. This, along with offering of experiential workshops, will constitute an important step towards widespread adoption of the workbook by New England stakeholders. Technical workshops and webinars will be offered and available on topics related to brownfields, from redevelopment to public health issues. Technical consultation sessions in all regions will be provided prior to major grant deadlines. A *Brownfields Corps* of students will be created to build our workforce development throughout New England, resulting in trained experts in brownfield redevelopment for the region. Also, a database of stakeholders will be created across New England to streamline communication outlets.

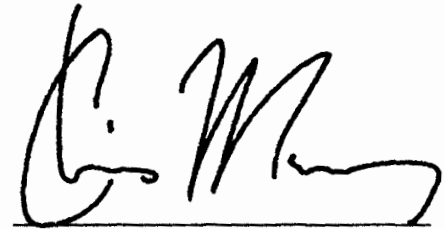
Some key elements that will make this regional approach successful are located in Connecticut – specifically the strategic location of UConn which allows close proximity to the two states with the most brownfields in New England, CT and MA. Support will be provided by CT state agencies (DECD, DEEP, DPH) and all six New England agencies, in coordination with Councils of Government and Regional Planning Commissions throughout Region 1 to optimize resources. Pre-existing successful collaboration exists in brownfields work in the region. Also, multiple UConn centers exhibit history of successful collaboration with CT and regional partners to assist the Center.

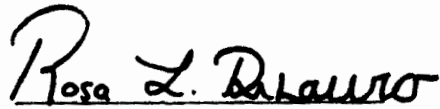
The regional approach that is envisioned in this effort leverages the various strengths of New England's communities, and is critical to fostering an environment of collaboration that will move brownfields redevelopment in EPA Region 1 forward.

We enthusiastically support the concept and mission of the New England Center for Brownfields Redevelopment, and we respectfully request that the proposal receive your full consideration. Thank you for your attention to this important matter.

Sincerely,

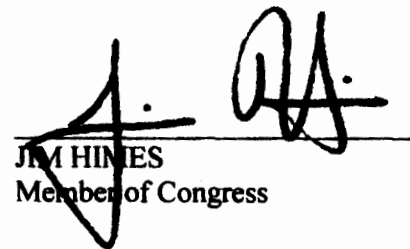

RICHARD BLUMENTHAL
United States Senator


CHRISTOPHER S. MURPHY
United States Senator


ROSA DELAURO
Member of Congress


JOE COURTNEY
Member of Congress


ELIZABETH ESTY
Member of Congress


JIM HINES
Member of Congress

R1-H6-000-4043



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 15 2016

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE
NOW THE
OFFICE OF LAND AND
EMERGENCY MANAGEMENT

The Honorable Christopher S. Murphy
United States Senate
Washington, D.C. 20510

Dear Senator Murphy:

Thank you for your letters of January 27, 2016, to the U.S. Environmental Protection Agency (EPA) and the EPA Region 1 office, supporting the brownfields grant proposal from the New England Center for Brownfields Redevelopment (NEBR) in Mansfield, Connecticut. We appreciate your interest in the Brownfields Program and your support of this proposal.

As you know, the Small Business Liability Relief and Brownfields Revitalization Act assists states and communities throughout the country in their efforts to revitalize and reclaim brownfields sites. The brownfield program is an excellent example of the success that is possible when people of all points of view work together to improve the environment and their communities.

We are very excited to offer the Technical Assistance to Brownfield Communities grants as they provide valuable technical assistance to communities across the country. Please be assured that NEBR's proposal will be carefully reviewed and evaluated based on the evaluation criteria published in the solicitation and will be given every consideration.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Raquel Snyder, in EPA's Office of Congressional and Intergovernmental Relations, at snyder.raquel@epa.gov, or at (202) 564-9586.

Sincerely,

A handwritten signature in black ink that reads "Mathy Stanislaus". The signature is written in a cursive, flowing style.

Mathy Stanislaus
Assistant Administrator
Office of Land and Emergency Management

AL-16000-3739

DAVID B. MCKINLEY, P.E.
1st District, West Virginia

412 CANNON HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
TEL: (202) 225-4112
FAX: (202) 225-7564
www.mckinley.house.gov

Congress of the United States
House of Representatives

COMMITTEE ON
ENERGY AND COMMERCE

SUBCOMMITTEE ON
ENERGY AND POWER

SUBCOMMITTEE ON
ENVIRONMENT AND THE ECONOMY

SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS
Vice Chair

DE CHAIR
CONGRESSIONAL ARTISTRY CAREERS

DE CHAIR
CONGRESSIONAL YOUTH CHALLENGE CAREERS

DE CHAIR
HIGH PERFORMANCE BUILDING CAREERS

DE CHAIR
CONGRESSIONAL HEARING HEALTH CAREERS

January 11, 2016

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20004

Dear Administrator McCarthy:

I am writing in regards to the U.S. Environmental Protection Agency's (EPA) Regional Offices and the basic organizational structure of these offices.

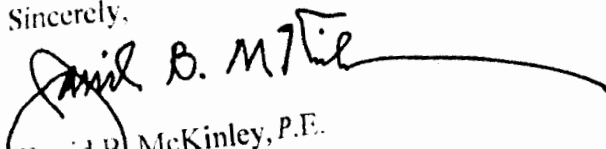
As you know, West Virginia falls under the jurisdiction of EPA Regional 3 Office. Recently, it was brought to my attention that there are some discrepancies in how rules and regulations are carried out between this office and the neighboring region, Region 4.

Given this situation, I would like to get your perspective on several select issues:

1. Are discrepancies in how rules and regulations are carried common practice among the agency?
2. What steps can EPA take to ensure more uniformity in the way regulations are carried out among the regional offices?
3. What are the actions that EPA would need to take to restructure the regions?

Thank you for your assistance in this matter. Please feel free to contact Blake Deeley (blake.deeley@mail.house.gov) with any further questions or concerns about this inquiry.

Sincerely,


David B. McKinley, P.E.
Member of Congress



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 29 2016

OFFICE OF
POLICY

The Honorable David B. McKinley
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman McKinley:

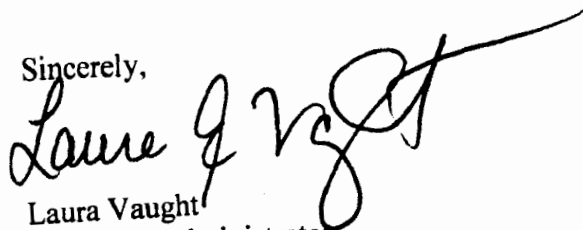
Thank you for your letter of January 11, 2016, to the U.S. Environmental Protection Agency Administrator Gina McCarthy. The Administrator asked that I respond on her behalf.

As you know, the EPA's structure includes ten regional offices that work closely with our state partners to implement many of the agency's programs that provide clean air, clean water, and safe communities for the American people. The EPA follows congressional direction, expressed by statutes, by generally promulgating national rules that establish consistent standards across the country. Those rules are developed through an agency process that observes guiding principles established by statutes and civil court decisions. Often the EPA regional offices participate in the development of the rules, and rules are typically finalized after a public comment period. In addition to a rule's preamble, regulatory text, and supporting documentation, rules are often also accompanied by publicly available fact sheets, question and answer documents, and other information that summarizes and clarifies the rule and its requirements. The EPA headquarters and regional offices work closely together with our state partners to effectively implement those rules.

Restructuring the agency's regions would involve an internal and external review process to examine the impacts and efficiencies of the restructuring on the agency's ability to accomplish its mission. The review would examine resource implications, the resulting organizational structure, and employee impacts. After internal agency review, for a reorganization of this magnitude, the agency would also seek Congressional approval prior to it being implemented.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Christina J. Moody in EPA's Office of Congressional and Intergovernmental Relations at moody.christina@epa.gov or (202) 564-0260.

Sincerely,


Laura Vaught
Associate Administrator

Congress of the United States
Washington, DC 20515

March 2, 2016

Gina McCarthy, Administrator
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Administrator McCarthy:

We are writing to express our strong concerns with the Interim Recommendations released by EPA on September 25, 2015 regarding environmental standards and ecolabels for use in federal procurement. We are disappointed to see that the recommendation for lumber and wood in construction excludes many American-grown forest products by recommending only those products certified to the Forest Stewardship Council (FSC).

We urge you to immediately revise this flawed action by adding recognition for wood products that are certified to the Sustainable Forestry Initiative (SFI) and the American Tree Farm System (ATFS) as recommended for federal purchasing for lumber and wood.

Across the United States, there are more than 82 million acres of forestland certified to either SFI or ATFS. This represents more than 70% of all certified forests in the U.S. ATFS and SFI certified forests are managed to provide a renewable timber resource, clean water, wildlife habitat, and numerous other public benefits. These forests also provide thousands of jobs in the forest sector and related industries.

By excluding SFI and ATFS standards from the recommended standards for federal procurement, the EPA is sending a terribly flawed and misinformed signal to the rest of the federal government, and to the private sector, which looks to the federal government for guidance on environmental purchasing.

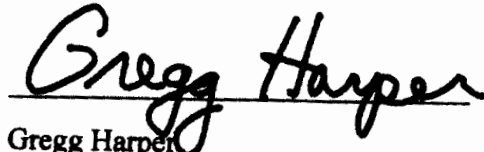
The action discredits the use of wood in government construction. This makes no sense when wood is one of the best materials architects and engineers have for reducing greenhouse gas emissions and storing carbon in buildings. Wood is a cost-effective, energy-efficient, renewable and sustainable solution for building construction.

EPA's position is inconsistent with numerous other federal agencies that have recognized and supported the use of wood in building construction, including wood certified to SFI and ATFS alongside FSC. For example, the Department of Agriculture's BioPreferred Program, which EPA has acknowledged sets mandatory purchasing requirements for federal agencies, fully recognizes wood products and accepts all three forest certification programs. EPA's recommendation is even inconsistent with guidelines listed in other places on EPA's website.

Additionally, EPA failed to follow a fair and transparent process for determining which standards to recognize for wood and lumber, as this recommendation was never made available for public comment.

We urge you to rectify this flawed recommendation and issue a revision to your Interim Recommendations by adding SFI and ATFS to the certification list for lumber and wood.

Sincerely,



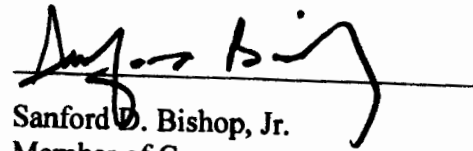
Gregg Harper
Member of Congress



Kurt Schrader
Member of Congress



Jaime Herrera Beutler
Member of Congress



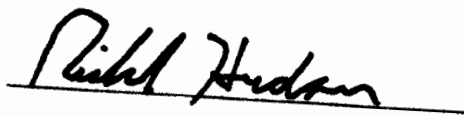
Sanford D. Bishop, Jr.
Member of Congress



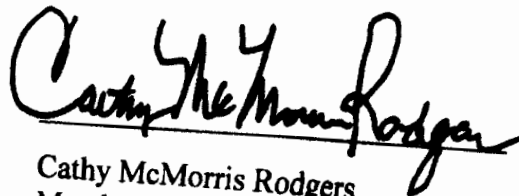
Glenn Thompson
Member of Congress



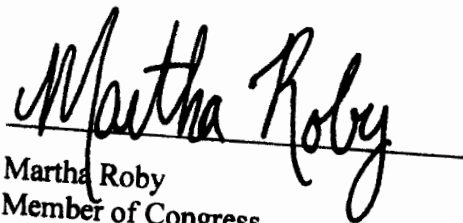
Gwen Graham
Member of Congress



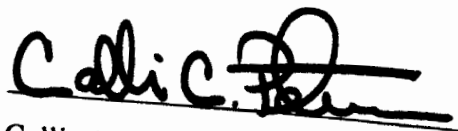
Richard Hudson
Member of Congress



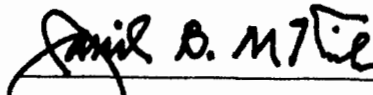
Cathy McMorris Rodgers
Member of Congress



Martha Roby
Member of Congress



Collin C. Peterson
Member of Congress



David B. McKinley, P.E.
Member of Congress



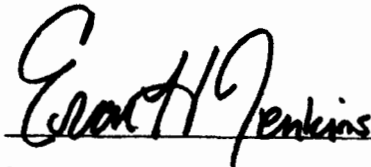
G.K. Butterfield
Member of Congress




Rick Nolan
Member of Congress



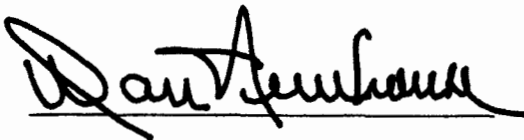
Steven M. Palazzo
Member of Congress



Evan H. Jenkins
Member of Congress



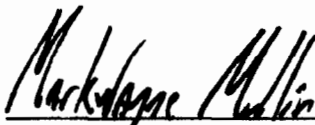
Derek Kilmer
Member of Congress



Dan Newhouse
Member of Congress



Mike Simpson
Member of Congress



Markwayne Mullin
Member of Congress



Ann McLane Kuster
Member of Congress



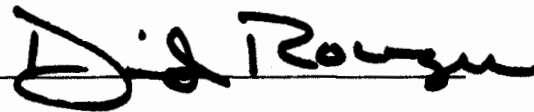
Bob Goodlatte
Member of Congress



Ralph Abraham
Member of Congress



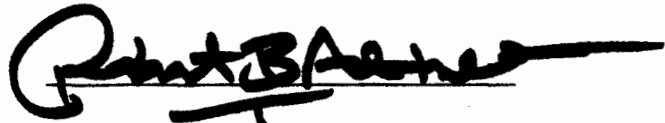
Greg Walden
Member of Congress



David Rouzer
Member of Congress



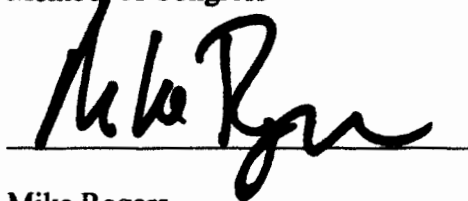
Chellie Pingree
Member of Congress



Robert B. Aderholt
Member of Congress



Dan Benishek M.D.
Member of Congress



Mike Rogers
Member of Congress



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 26 2016

The Honorable Kurt Schrader
House of Representatives
Washington, D.C. 20515

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Dear Congressman Schrader:

Thank you for your letter of March 2, 2016, and your interest in the U.S. Environmental Protection Agency's Interim Recommendations of Specifications, Standards, and Ecolabels for federal environmentally sustainable procurement.

The Implementing Instructions for Executive Order 13693 – *Planning for Federal Sustainability in the Next Decade* – directed the EPA, in consultation with the Office of Management and Budget and the Council on Environmental Quality, to issue these recommendations to assist federal purchasers in identifying and procuring environmentally sustainable products. The EPA's Interim Recommendation for the lumber/wood category is based on the Department of Energy's Fiscal Year 2016 (FY16) Priority Products List.

As a result of stakeholder inquiries since the release of the Interim Recommendations, the EPA has met and is continuing to work with the U.S. Department of Agriculture and the U.S. Department of Energy's Office of Sustainable Environmental Stewardship to gain further information. I have also directed the agency's Standards Executive to reach out to the Sustainable Forestry Initiative and the other forestry labels that stakeholders have requested the EPA consider. She will be in touch with these groups regarding her review of forestry labels and their alignment with the National Technology Transfer and Advancement Act, the OMB Circular A119, and related federal policies that guide the EPA's use of voluntary consensus standards and private sector conformity assessment activities. In addition, the EPA continues to progress with piloting our Guidelines for Assessing Standards and Ecolabels for Use in Federal Procurement (the Guidelines), and hopes that information gleaned from this process will inform thinking related to the lumber/wood category. Finally, the DOE continues to conduct research to inform their FY16 Priority Products List. The EPA looks forward to reviewing all of this additional data to inform if and how the lumber/wood category of Interim Recommendations might be revised.

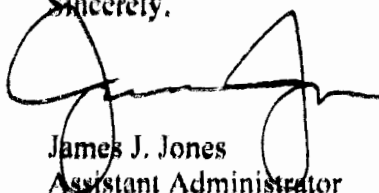
In your letter you also shared concerns about the need for a public comment period on the Interim Recommendations. The Implementing Instructions for the E.O., issued June 2015, directed the EPA, to provide these recommendations within 90 days of the issuance of the Instructions, which did not include an opportunity for public comment.

The agency has, and will continue to provide, mechanisms for public input as we develop these recommendations. We issued Federal Register Notices on the initial draft guidelines in 2014 and in March 2015 for the launch of our pilot work. Those FRNs were open to public comment and they marked the beginning of our efforts to engage multi-stakeholder panels whose counsel will be considered as we move to finalize our recommendations. Further, any federal acquisition requirements stemming from the recommendations would include a public comment process prior to incorporation

into the Federal Acquisition Regulations. As such, FAR Case 2015-033 has been developed in order to integrate the new requirements of E.O. 13693 into the FAR. All next steps related to this case, including when it will be available to the public, are viewable at http://www.acq.osd.mil/dpap/dars/far_case_status.html.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Sven-Erik Kaiser in the EPA's Office of Congressional and Intergovernmental Relations at kaiser.sven-erik@epa.gov or 202-566-2753.

Sincerely,

A handwritten signature in black ink, appearing to be "James J. Jones", written over a horizontal line.

James J. Jones
Assistant Administrator